

From: Taylor, Matt
To: Pat, Subash
Subject: FW: Removal Site Evaluation Request - Patterson Avenue VI - Greensboro, NC
Date: Thursday, July 7, 2016 9:11:16 AM
Attachments: remove001.png
Soil Gas and Groundwater Screening Report (Patterson).pdf

Please add to the RSE spreadsheet and this RSE has been assigned to Perry Gaughan

From: Bateson, James [mailto:james.bateson@ncdenr.gov]
Sent: Friday, July 01, 2016 2:56 PM
To: Kenneth Rhame <Rhame.Kenneth@epa.gov>; McGuire, Jim <McGuire.Jim@epa.gov>; Taylor, Matt <Taylor.Matt@epa.gov>
Cc: Qi, Qu <qu.qi@ncdenr.gov>; Jesneck, Charlotte <charlotte.jesneck@ncdenr.gov>; Scott, Michael <michael.scott@ncdenr.gov>; hanna.assefa@ncdenr.gov
Subject: Removal Site Evaluation Request - Patterson Avenue VI - Greensboro, NC

Ken, Jim, Matt,

NC DEQ Division of Waste Management requests that EPA Region 4 Superfund Emergency Response and Removal Branch conduct a Removal Site Evaluation (RSE) in a residential neighborhood located south of, and downgradient from, an industrial district along Patterson Avenue in Greensboro, NC.

There are four North Carolina Inactive Hazardous Sites Branch (IHSB) sites and three RCRA sites located in close proximity along Patterson Street in Greensboro. All of these sites have known or suspected chlorinated solvent releases to groundwater; some are documented to be of significant scale and concentration. The groundwater plumes from these sites are migrating downslope to the south towards a low-income residential area.

NC IHSB has conducted a limited screening investigation to address potential vapor intrusion risk in the neighborhood. Paired temporary water table monitoring wells and soil gas probes were installed at eight locations along a 4500 foot transect along a street bounding the upgradient edge of the residential area (see locations on the attached figure). The water table is about 25 feet below the surface beneath the facilities, and is as shallow as 8 feet beneath the residential neighborhood. Results (see attached *Soil Gas and Groundwater Screening Report*) indicated the need for NC IHSB to conduct indoor air or crawlspace air at six residential structures. Results are summarized in the table below. The results have been validated by the laboratory, and our IHSB contractor will furnish their final report soon.

Trichloroethylene (TCE) results for crawl space vapor samples CS-3 and CS-4 indicated the potential need for an immediate interim response. NC IHSB staff are transporting four VOCARB indoor air purification filters to the site this afternoon (Friday, July 1), and will be coordinating with Guilford County Environmental Health staff to deploy the units in two adjacent duplex structures located at 2832 and 2834 Camborne Street. One of the occupants of a duplex unit at 2834 Camborne Street (sample CS-3, 1.74 ug/M3 TCE) is pregnant. IHSB may be able to have crawl space ventilation fans installed in the two structures in the near future. Owner of those two structures is an out of state absentee landlord.

Project Sample ID	IA-1	IA-2	AMBIENT	CS-1	CS-2	CS-3	CS-4	CS-DUP
Date Collected	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016
Method	Result	RDL	Result	RDL	Result	RDL	Result	RDL
TO-15	1,2-DICHLOROETHANE	ND	0.81	ND	0.81	ND	0.81	ND
TO-15	1,1-DICHLOROETHANE	ND	0.0802	ND	0.0802	ND	0.0802	ND
TO-15	1,1-DICHLOROETHENE	0.255	0.0793	0.334	0.0793	0.172	0.0802	ND
TO-15	CIS-1,2-DICHLOROETHENE	ND	0.0793	ND	0.0793	ND	0.228	0.0793
TO-15	TETRACHLOROETHENE	ND	0.0793	ND	0.0793	ND	0.315	0.0793
TO-15	1,1,1-TRICHLOROETHANE	0.635	0.136	0.324	0.136	0.237	0.136	0.978
TO-15	1,1,1-TRICHLOROETHANE	0.212	0.109	ND	0.109	0.346	0.109	ND
TO-15	1,1,1-TRICHLOROETHANE	0.827	0.107	0.276	0.107	0.131	0.107	ND
Qualifiers: B: The same analyte is found in the associated blank.								

IA-1 (Indoor Air) = 2841 Camborne
IA-2 (Indoor Air) = 2835 Camborne
CS-1 (Crawl Space) and Ambient = 2837 Camborne
CS-2 = 2836 Camborne
CS-3 = 2834 Camborne
CS-4 = 2832 Camborne

Although NC IHSB may be able to manage risks associated with potential vapor intrusion into the two structures already identified to be at risk, our agency is requesting an RSE because of the need for a greater number of soil gas data points in order to identify other areas in the neighborhood that might have elevated soil gas concentrations. In our experience in Piedmont solvent sites, downgradient soil gas impacts have high spatial variability and can be difficult to predict without sufficient data density. At several sites in the state, right-of-way soil gas work of appropriate density has proven successful at identifying the groups of houses needing further work. As most houses in the neighborhood are built over crawl spaces, vapor mitigation costs are not expected to be prohibitive.

NC IHSB has depleted its Orphan Sites Cleanup fund in the assessment of vapor intrusion risks at eight sites during the past fiscal year. Next year's funding will not be available until October or November. We intend to use that funding to continue vapor intrusion screening at as many sites as possible next year, and the task at hand at the Patterson Avenue neighborhood would consume a considerable fraction of our available Orphan Site Cleanup Fund receipts.

Qu Qi, IHSB Central Region Unit Supervisor, (919) 707-8213, will be able to serve as NC DEQ counterpart to the OSC.

Thank you for considering this site for an RSE.

Jim

Jim Bateson
Section Chief
Division of Waste Management, Superfund Section
North Carolina Department of Environmental Quality

(919) 707-8329 phone and fax
james.bateson@ncdenr.gov

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Raleigh, NC 27699-1646



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North Carolina Public Records Law and may be disclosed to third parties.

I'll follow up with a phone call. The lab is very confident in that result. They had two runs on the CS-4 sample (one undiluted, one after dilution).

The owner for all three properties on the north side of Camborne (2832, 2834 and 2836) is Darrell Stewart. He is in Modesto California. His number is 209-605-4223.

My memory was incorrect - there was some debris in the crawlspace at 2832 (photo attached). During the sampling we did not identify anything containing VOCs but you can't rule out the possibility of something being in there. No one was home (or wouldn't answer their door) at this duplex to speak to. Just small barking dog. Note, the front of the house has one storm door, but there are two doors behind it to each side of the duplex.

Below is a corrected table:

Project Sample ID	IA-1	IA-2	AMBIENT	CS-1	CS-2	CS-3	CS-4	CS-DUP
Date Collected	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016
Method	Result	RDL	Result	RDL	Result	RDL	Result	RDL
TO-15	1,2-DICHLOROETHANE	ND	0.81	ND	0.81	ND	0.81	ND
TO-15	1,1-DICHLOROETHANE	ND	0.0802	ND	0.0802	ND	0.0802	ND
TO-15	1,1-DICHLOROETHENE	0.255	0.0793	0.334	0.0793	0.172	0.0802	ND
TO-15	CIS-1,2-DICHLOROETHENE	ND	0.0793	ND	0.0793	ND	0.228	0.0793
TO-15	TETRACHLOROETHENE	ND	0.0793	ND	0.0793	ND	0.315	0.0793
TO-15	1,1,1-TRICHLOROETHANE	0.635	0.136	0.324	0.136	0.237	0.136	0.978
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TO-15	1,1,1-TRICHLOROETHANE	0.827	0.107	0.276	0.107	0.131	0.107	ND
Qualifiers: B: The same analyte is found in the associated blank.								

From: Jason Laine Volker
Sent: Wednesday, June 29, 2016 1:50 PM
To: 'Qi, Qu' <qu.qi@ncdenr.gov>
Subject: RE: Chemical and Solvents Results

Qu,

Tom Mellette at ESC says don't do anything until he has a chance to have the results reviewed by his analyst. He's at lunch now but will be back to the office soon and will let me know something asap.

I see that the canister with a low sample volume was actually CS-2 collected at 2836 Camborne.

Jason

From: Qi, Qu [mailto:qu.qi@ncdenr.gov]
Sent: Wednesday, June 29, 2016 12:04 PM
To: Jason Laine Volker <JVolker@smeinc.com>
Subject: RE: Chemical and Solvents Results

Jason,

What is the address for CS-4?

Qu Qi, LG
Central Region Unit Supervisor
Inactive Hazardous Site Branch – SF Section - DWM
Department of Environmental Quality

919 707 8213 office
qu.qi@ncdenr.gov

217 West Jones Street
1646 Mail Service Center
Raleigh, NC 27699-1646



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North Carolina Public Records Law and may be disclosed to third parties.

From: Jason Laine Volker [<mailto:JVolker@smeinc.com>]
Sent: Wednesday, June 29, 2016 10:56 AM
To: Qi, Qu <qu.qi@ncdenr.gov>
Subject: Chemical and Solvents Results

Qu, attached is the lab report and quick draft table below. The lab was able to run all the samples despite some low sample volumes I mentioned previously. Now that I know what the lab invoice will be, I will follow up with a cost adjustment request to cover cost of the additional analysis for 1,2-DCA, as we previously discussed.

Thanks,
Jason

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CS-2 = 2836 Camborne
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Date Collected	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016	06/21/2016
Method	Result	RDL	Result	RDL	Result	RDL	Result	RDL
TO-15	1,2-DICHLOROETHANE	ND	0.2	ND	0.2	ND	0.2	ND
TO-15	1,1-DICHLOROETHANE	ND	0.02	ND	0.02	ND	0.02	ND
TO-15	1,1-DICHLOROETHENE	0.0642	0.02	0.0842	0.02	0.0434	0.02	0.0434
TO-15	CS-1,2-	ND	0.02	ND	0.02	ND	0.02	ND
TO-15	DICHLOROETHENE	0.0935	0.02	0.0477	0.02	0.035	0.02	0.035
TO-15	TETRACHLOROETHENE	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	1,1,1-	0.0389	0.02	ND	0.02	0.0636	0.02	0.0636
TO-15	TRICHLOROETHANE	0.154	0.02	0.0516	0.02	0.0245	0.02	0.0245
TO-15	TRICHLOROETHENE	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	1,2-DICHLOROETHANE	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	1,1-DICHLOROETHANE	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	1,1-DICHLOROETHENE	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	1,1,1-	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	TRICHLOROETHANE	0.02	0.02	0.02	0.02	0.02	0.02	0.02
TO-15	TRICHLOROETHENE	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Jason Volker, LSS
Project Scientist

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